

Application No. 10/750,860

In the claims:

1. (currently amended) An article comprising:

a spinal prosthesis comprising a unitary body with at least three attachment points attachable to a posterior portion of a spinal structure, said unitary body comprising a flexure assembly positioned between first and second attachment members, wherein flexure of said flexure assembly permits movement of the first attachment member relative to the second attachment member,

wherein said flexure assembly comprises a multi-part articulating assembly, adapted to replace a natural facet joint and to be disposed in the posterior portion of the spinal structure, including a first joint member that has a convex contour that articulates with a second joint member that has a concave contour that corresponds to and glides over the convex contour of the first joint member, said first and second joint members being attached to or integrally part of said attachment members; and wherein pedicle screw mounting members extend non-perpendicularly outwards from said first and second attachment members, and wherein pedicle screws, each having a threaded shank and a swivel head, are attached to said pedicle screw mounting members.

2. (withdrawn) The article according to claim 1, wherein said first and second attachment members are formed with mounting holes adapted for a mechanical fastener to pass through and into the spinal structure.

3. (withdrawn) The article according to claim 1, wherein said first and second attachment members comprise sidewalls separated by a gap, the gap being adapted for receiving therein a posterior portion of the spine.

4. (withdrawn) The article according to claim 1, wherein said flexure assembly is attached to said first and second attachment members by means of a tenon-and-mortise joint.

5. (withdrawn) The article according to claim 1, wherein said first and second attachment members comprise at least one pair of opposing resilient pawls adapted for gripping the portion of the spine.

6. (withdrawn) The article according to claim 1, wherein said flexure assembly comprises more than one flexure member between said first and second attachment members.

7. (withdrawn) The article according to claim 1, wherein at least a portion of said flexure assembly is attached to said first and second attachment members with a plurality of locking members.

8. (currently amended) The article according to claim ~~1~~23, wherein at least a portion of said flexure assembly is integrally formed with said first and second attachment members.

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9. (withdrawn) The article according to claim 7, wherein said locking members comprise plate-like elements secured to said first and second attachment members with mechanical fasteners.
10. (withdrawn) The article according to claim 9, wherein said locking members comprise at least one lug extending generally perpendicularly from said plate-like elements, around which at least one stopper is engaged.
11. (currently amended) The article according to claim ~~1~~23, wherein said flexure assembly comprises a boot placed at least partially around inner portions of said first and second attachment members, said boot being connected to said first and second attachment members.
12. (original) The article according to claim 11, wherein said boot is elastomeric.
13. (currently amended) The article according to claim ~~1~~23, wherein said flexure assembly is adapted to flex omnidirectionally.
14. (withdrawn) The article according to claim 1, further comprising a plurality of pedicle screws attached to or integrally formed with said spinal prosthesis.
15. (withdrawn) The article according to claim 14, wherein said pedicle screws comprise polyaxial pedicle screws having a threaded shank and a polyaxial swivel head.
16. (withdrawn) The article according to claim 15, wherein said threaded shank is attached to or integrally formed with said spinal prosthesis.
17. (withdrawn) The article according to claim 15, wherein said polyaxial swivel head is attached to or integrally formed with said spinal prosthesis.
18. (withdrawn) The article according to claim 1, wherein said first and second attachment members comprise mounting arms rotatably mounted in a housing, one portion of each mounting arm being disposed in a hollow chamber formed in the housing, and another portion of each mounting arm protruding from the housing through an aperture formed in the housing.
19. (currently amended) The article according to claim ~~1~~23, wherein said first joint member has a truncated face formed in said convex contour.
20. (original) The article according to claim 19, further comprising a stopper that limits the flexure of said flexure assembly and limits relative movement of the attachment members with respect to one another.
21. (previously presented) The article according to claim 19, wherein said truncated face comprises a semi-circular cutout gouged out of said convex outer contour.
22. (currently amended) ~~The article according to claim 21, comprising:~~ An article according to claim 21, comprising:

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a spinal prosthesis comprising a unitary body with at least three attachment points attachable to a spinal structure, said unitary body comprising a flexure assembly positioned between first and second attachment members, wherein flexure of said flexure assembly permits movement of the first attachment member relative to the second attachment member, wherein said flexure assembly comprises a multi-part articulating assembly, including a first joint member that has a convex contour that articulates with a second joint member that has a concave contour that corresponds to and glides over the convex contour of the first joint member, said first and second joint members being attached to or integrally part of said attachment members; and wherein pedicle screw mounting members extend non-perpendicularly outwards from said first and second attachment members, and wherein pedicle screws, each having a threaded shank and a swivel head, are attached to said pedicle screw mounting members, wherein said first joint member has a truncated face formed in said convex contour and wherein said truncated face comprises a semi-circular cutout gouged out of said convex outer contour, and further comprising a stopper that limits the flexure of said flexure assembly and limits relative movement of the attachment members with respect to one another, wherein said stopper protrudes into the semi-circular cutout.

23. (currently amended) ~~The~~ An article according to claim 1, comprising:

a spinal prosthesis comprising a unitary body with at least three attachment points attachable to a spinal structure, said unitary body comprising a flexure assembly positioned between first and second attachment members, wherein flexure of said flexure assembly permits movement of the first attachment member relative to the second attachment member,

wherein said flexure assembly comprises a multi-part articulating assembly, including a first joint member that has a convex contour that articulates with a second joint member that has a concave contour that corresponds to and glides over the convex contour of the first joint member, said first and second joint members being attached to or integrally part of said attachment members; and wherein pedicle screw mounting members extend non-perpendicularly outwards from said first and second attachment members, and wherein pedicle screws, each having a threaded shank and a swivel head, are attached to said pedicle screw mounting members, wherein said pedicle screw mounting members comprise rounded prongs.

24. (previously presented) The article according to claim 1, wherein said pedicle screws are rotatably attached to said pedicle screw mounting members.